



Ohio Legislative Service Commission

Bill Analysis

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Sub. S.B. 243*

128th General Assembly

(As Reported by S. Health, Human Services and Aging)

Sens. Buehrer, Carey, Coughlin, Faber, Gibbs, Grendell, Jones, Schaffer

BILL SUMMARY

- Prohibits the creation of a human-animal hybrid associated activities.
- Imposes, for violating any of the prohibitions, a criminal penalty consisting of imprisonment of up to five years and, if monetary gain resulted from the violation, a fine of at least \$1 million.
- Exempts certain research activities and scientific procedures from the prohibitions regarding human-animal hybrids.

CONTENT AND OPERATION

Prohibitions regarding human-animal hybrids

(R.C. 3701.95(A) and (B))

The bill prohibits a person from knowingly doing any of the following:

- (1) Creating or attempting to create a human-animal hybrid;
- (2) Transferring or attempting to transfer a human embryo into a nonhuman womb;
- (3) Transferring or attempting to transfer a nonhuman embryo into a human womb;

* This analysis was prepared before the report of the Senate Health, Human Services and Aging Committee appeared in the Senate Journal. Note that the list of co-sponsors and the legislative history may be incomplete.

(4) Transporting or receiving for any purpose a human-animal hybrid.

The bill defines a "human-animal hybrid" as any of the following: (1) a human embryo into which a nonhuman cell or a component of a nonhuman cell is introduced so that it is uncertain whether the human embryo is a member of the species *Homo sapiens*, (2) a hybrid human-animal embryo produced by fertilizing a human egg with a nonhuman sperm, (3) a hybrid human-animal embryo produced by fertilizing a nonhuman egg with a human sperm, (4) an embryo produced by introducing a nonhuman nucleus into a human egg, (5) an embryo produced by introducing a human nucleus into a nonhuman egg, (6) an embryo containing at least haploid¹ sets of chromosomes from both a human and nonhuman life form, (7) a nonhuman life form engineered such that human gametes² develop within the body of a nonhuman life form, or (8) a nonhuman life form engineered such that it contains a human brain or a brain derived wholly or predominately from human neural tissues. "Human embryo" is defined as an organism of the species *Homo sapiens* during the earliest stages of development from one cell up to eight weeks.

Exemption for research and xenotransplantation

(R.C. 3701.95(C))

The bill specifies that its prohibitions regarding human-animal hybrids do not prohibit either of the following: (1) research involving the use of transgenic³ animal models containing human genes, or (2) xenotransplantation⁴ of human organs, tissues, or cells into recipient animals other than animal embryos.

¹ "Haploid" means having a single set of chromosomes, representing the normal complement of the species. In humans, the haploid number is "23." (Dorland's Medical Dictionary (online version), available at: <<http://www.mercksource.com>>.)

² A "gamete" is one of two haploid reproductive cells, male and female, whose union is necessary in sexual reproduction to initiate the development of a new individual (*Id.*).

³ "Transgenic" means relating to a segment of recombinant DNA that has been transferred from one genome to another (*Id.*).

⁴ "Xenotransplantation" means any procedure that involves the transplantation, implantation, or infusion into a human recipient of either (1) live cells, tissues, or organs from a nonhuman animal source, or (2) human body fluids, cells, tissues, or organs that have had *ex vivo* contact with live nonhuman animal cells, tissues, or organs (U.S. Food and Drug Administration, *Vaccines, Blood & Biologics: Xenotransplantation*, available at <<http://www.fda.gov/BiologicsBloodVaccines/xenotransplantation/default.htm>>).

Penalties

(R.C. 3701.99(D))

A person who violates the bill's prohibitions regarding human-animal hybrids is subject to a criminal penalty that generally consists of a term of imprisonment not to exceed five years. If the offender derives pecuniary gain as a result of the violation, the offender is also subject to a fine of not less than \$1 million and not more than an amount equal to two times the amount of the gross pecuniary gain if that amount is more than \$1 million.

HISTORY

ACTION	DATE
Introduced	03-18-10
Reported, S. Health, Human Services & Aging	---

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